Bill of Lading # -0871040 NITRIC ACID 42 BE

May 23, 2019

SAFETY CONTACT
BULK CHEMICALS INC OT
809 MOHRSVILLE ROAD
MOHRSVILLE, PA 19541

DEAR SAFETY CONTACT

We have enclosed Safety Data Sheets for those chemicals you have just received from us either for the first time or since our last SDS revision.

Product Name: NITRIC ACID 42 BE

The OSHA right to know requires that you distribute or make available the SDS's to people in your company who are involved with these chemicals.

We thank you for your valued business and hope we may continue to merit serving your future requirements.

Very truly yours, Gary Moulder, CHMM Safety, Health & Environmental Manager



SAFETY DATA SHEET

1. Identification

Product identifier **NITRIC ACID 42 BE**

Other means of identification None.

ALL PROPER AND LEGAL PURPOSES Recommended use

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Brenntag Northeast, LLC Company name 81 West Huller Lane Address

Reading, PA 19605

610-926-4151 Telephone Not available. E-mail

800-424-9300 Chemtrec Emergency phone number

2. Hazard(s) identification

Category 2 Physical hazards Oxidizing liquids Category 1A Health hazards Skin corrosion/irritation

Serious eye damage/eye irritation Category 1

Environmental hazards Not classified. OSHA defined hazards Not classified.

Label elements



Signal word

May intensify fire; oxidizer. Causes severe skin burns and eye damage. Causes serious eye Hazard statement

damage.

Precautionary statement

Prevention Keep away from heat. Keep/Store away from clothing and other combustible materials. Take any

precaution to avoid mixing with combustibles. Do not breathe mist or vapor. Wash thoroughly after

handling. Wear protective gloves/protective clothing/eye protection/face protection.

If swallowed: Rinse mouth, Do NOT induce vomiting, If on skin (or hair): Take off immediately all Response

contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. Wash contaminated clothing before reuse. In case of fire: Use appropriate media to

extinguish

Store locked up. Storage

Dispose of contents/container in accordance with local/regional/national/international regulations. Disposal

Hazard(s) not otherwise

classified (HNOC)

None known.

Supplemental information 67.18% of the mixture consists of component(s) of unknown acute oral toxicity. 67.18% of the

mixture consists of component(s) of unknown acute dermal toxicity. 100% of the mixture consists

of component(s) of unknown acute inhalation toxicity.

3. Composition/information on ingredients

Mixtures

638224 Version #: 19 Revision date: 02-25-2019 Issue date: 04-09-2015

Chemical name	Common name and synonyms	CAS number	%
NITRIC ACID		7697-37-2	67.18
Other components below r	eportable levels		32.82

^{*}Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact IF ON CLOTHING: rinse immediately contaminated clothing and skin with plenty of water before

removing clothes. Rinse skin with water/shower. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if Eye contact

present and easy to do. Continue rinsing. Call a physician or poison control center immediately. Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If

vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Most important symptoms/effects, acute and delayed

Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.

General information

Take off all contaminated clothing immediately. Contact with combustible material may cause fire. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media Unsuitable extinguishing

media

Ingestion

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2). Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from

the chemical

Special protective equipment and precautions for firefighters

Fire fighting

Specific methods General fire hazards

equipment/instructions

Greatly increases the burning rate of combustible materials. Containers may explode when heated. During fire, gases hazardous to health may be formed.

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

In case of fire and/or explosion do not breathe fumes. In case of fire: Stop leak if safe to do so, Move containers from fire area if you can do so without risk.

Use standard firefighting procedures and consider the hazards of other involved materials.

May intensify fire; oxidizer. Contact with combustible material may cause fire.

Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep away from clothing and other combustible materials. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Ventilate the contaminated area. Wear appropriate protective equipment and clothing during clean-up.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

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7. Handling and storage

Precautions for safe handling

Keep away from heat. Take any precaution to avoid mixing with combustibles. Keep away from clothing and other combustible materials. Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store locked up. Keep away from heat. Store in a cool, dry place out of direct sunlight, Store in original tightly closed container. Store in a well-ventilated place. Do not store near combustible materials. Store away from incompatible materials (see Section 10 of the SDS). Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	
NITRIC ACID (CAS 7697-37-2)	PEL	5 mg/m3	
		2 ppm	
US. ACGIH Threshold Limit Val	lues		
Components	Type	Value	
NITRIC ACID (CAS 7697-37-2)	STEL	4 ppm	
,	TWA	2 ppm	
US. NIOSH: Pocket Guide to Ch	nemical Hazards		
Components	Туре	Value	
NITRIC ACID (CAS 7697-37-2)	STEL	10 mg/m3	
·		4 ppm	
	TWA	5 mg/m3	
		2 ppm	

Biological limit values

Appropriate engineering controls

No biological exposure limits noted for the ingredient(s).

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

The following are recommendations for Personnel Protective Equipment (PPE). The employer/user of this product must perform a Hazard Assessment of the workplace according to OSHA regulations 29 CFR 1910.132 to determine the appropriate PPE for use while performing any task involving potential exposure to this product.

Eye/face protection Chemical goggles and face shield are recommended. Chemical goggles are recommended.

Skin protection

Hand protection Wear appropriate chemical resistant gloves. Be aware that the liquid may penetrate the gloves.

Frequent change is advisable. Suitable gloves can be recommended by the glove supplier.

Other Wear appropriate chemical resistant clothing.

In case of insufficient ventilation, wear suitable respiratory equipment. Wear suitable acid gas Respiratory protection

respirator with full face shield where required.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Keep from contact with clothing and other combustible materials. Remove and wash contaminated clothing promptly. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing

and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state Liquid. Form Liquid.

BROWNISH YELLOW Color

Material name: NITRIC ACID 42 BE

Odor **PUNGENT** Odor threshold Not available.

рΗ

Melting point/freezing point -25 °F (-31.67 °C) Initial boiling point and boiling 250 °F (121.11 °C)

range

Flash point Not available. **Evaporation rate** Not available. Flammability (solid, gas) Not applicable. Upper/lower flammability or explosive limits

Not available. Flammability limit - lower

(%)

Not available. Flammability limit - upper

(%)

Explosive limit - lower (%)

Not available.

Explosive limit - upper (%) Not available. Not available. Vapor pressure Not available Vapor density Not available. Relative density

Solubility(ies)

Solubility (water) Not available. Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperature Not available. Not available. Decomposition temperature **Viscosity** Not available.

Other information

Density 11.70 lbs/gal Explosive properties Not explosive.

Oxidizing properties May intensify fire; oxidizer.

Percent volatile 32.82 % estimated

Specific gravity

10. Stability and reactivity

Reactivity Greatly increases the burning rate of combustible materials.

Chemical stability Material is stable under normal conditions. Possibility of hazardous Hazardous polymerization does not occur.

reactions

Conditions to avoid Heat. Contact with incompatible materials.

Combustible material. Reducing agents. Alcohols. Incompatible materials

Hazardous decomposition Nitrogen oxides (NOx).

products

11. Toxicological information

Information on likely routes of exposure

Inhalation May cause irritation to the respiratory system. Prolonged inhalation may be harmful.

Skin contact Causes severe skin burns. Eye contact Causes serious eye damage. Ingestion Causes digestive tract burns.

Symptoms related to the physical, chemical and toxicological characteristics

Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

Information on toxicological effects

Acute toxicity Not known

Skin corrosion/irritation Causes severe skin burns and eye damage.

Serious eye damage/eye Causes serious eye damage.

irritation

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

No data available to indicate product or any components present at greater than 0.1% are Germ cell mutagenicity

mutagenic or genotoxic.

Not classifiable as to carcinogenicity to humans. Carcinogenicity

IARC Monographs. Overall Evaluation of Carcinogenicity

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

Not classified

Specific target organ toxicity -

repeated exposure

Not classified

Aspiration hazard Not an aspiration hazard.

Chronic effects Prolonged inhalation may be harmful.

12. Ecological information

The product is not classified as environmentally hazardous. However, this does not exclude the **Ecotoxicity**

possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability No data is available on the degradability of this product.

No data available Bioaccumulative potential Mobility in soil No data available

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation Other adverse effects

potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of

contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused

products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Since emptied containers may retain product residue, follow label warnings even after container is Contaminated packaging

emptied. Empty containers should be taken to an approved waste handling site for recycling or

disposal.

14. Transport information

DOT

UN number UN2031 NITRIC ACID UN proper shipping name

Transport hazard class(es) Class

8 Subsidiary risk 5.1 Packing group

Special precautions for user Read safety instructions, SDS and emergency procedures before handling

ERG number

Transport information on packaging may be different from that listed. Transportation information on packaging may be different from that listed.

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IATA

UN number UN2031
UN proper shipping name NITRIC ACID

Transport hazard class(es)

Class 8
Subsidiary risk 5.1
Packing group || Environmental hazards No.
ERG Code 157

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

IMDG

UN number UN2031

UN proper shipping name NITRIC ACID other than red fuming, with at least 65% but with not more than 70% nitric acid

solution (NITRIC ACID)

Transport hazard class(es)

Class 8
Subsidiary risk 5.1
Packing group ||
Environmental hazards

Marine pollutant No. EmS F-A, S-Q

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

DOT



IATA; IMDG



15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

NITRIC ACID (CAS 7697-37-2) Listed.

SARA 304 Emergency release notification

NITRIC ACID (CAS 7697-37-2) 1000 LBS OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Chemical name	CAS number	Reportable quantity (pounds)	Threshold planning quantity (pounds)	Threshold planning quantity, lower value (pounds)	Threshold planning quantity, upper value (pounds)	•
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1000 1000 NITRIC ACID 7697-37-2 Yes

SARA 311/312 Hazardous

chemical Classified hazard categories

Oxidizer (liquid, solid, or gas) Skin corrosion or irritation

Serious eye damage or eye irritation

SARA 313 (TRI reporting)

Chemical name CAS number % by wt. NITRIC ACID 7697-37-2 67.18

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

NITRIC ACID (CAS 7697-37-2)

Safe Drinking Water Act

Not regulated.

(SDWA)

US state regulations

California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 2016 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

US, California, Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

NITRIC ACID (CAS 7697-37-2)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (EL!NCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Toxic Chemical Substances (TCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

^{*}A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other information, including date of preparation or last revision

04-09-2015 Issue date Revision date 02-25-2019 Version# 19 HMIS® ratings Health: 3

Flammability: 0

Physical hazard: 2

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing

NFPA ratings Health: 3

Flammability: 0 Instability: 1

Insta

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representation or warranty, express or implied, regarding, and assumes no liability for the accuracy or completeness of the information. The Buyer assumes all responsibility for handling, using and/or reselling the Product in accordance with applicable federal, state, and local law. This

SDS shall not in any way limit or preclude the operation and effect of any of the provisions of

Brenntag's terms and conditions of sale.

Revision information Physical & Chemical Properties: Multiple Properties